	ATTORNEY DOCKET No.: 031676.0212
	ORM COVER SHEET
To the Honorable Commissioner for Patents: Please record the a	ttached original document(s) or copy(ies) thereof.
Name of Conveying Party(ies): Kirk Emil APT Ja F.C. Thomas ALLNUTT David J. KYLE Additional name(s) of conveying party(ies)	mes Casey LIPPMEIER attached?
Name and Address of Party(ies) receiving an interest (assign Name: Martek Biosciences Corporation Address: 6480 Dobbin Road Columbia, Maryland 21045 Country: U.S.A.	nee(s)): Name: Address: Country:
Additional name(s) and address(es) atta	ched?
3. Nature of Conveyance: Assignment Merger Verified Translation Security Agreement Execution Date: July 2, 2001 and August 2, 2001	Change of Name Other:
4. Application number(s) or patent number(s): If this document is being filed together with a new application A. Patent Application No(s).: 1 Others on additional sheet(s) attach	B. Patent No(s).:
5. Name and address of party to whom correspondence concerning document should be mailed: Laurence H. Posorske Intellectual Property Department Brobeck, Phleger & Harrison LLP 1333 H Street, N.W. Suite 800 Washington, DC 20005 (202) 220-6000 (telephone) (202) 220-5200 (facsimile)	6. Total number of applications and patents involved: Application(s): + Patent(s): = Total: 1 7. Total Fee (37 C.F.R. § 3.41) \$ 40.00 Enclosed Authorized to be charged to Deposit Account 8. Deposit Account No.: (Duplicate copy of this sheet attached) Charge any underpayment or credit any overpayment to above Deposit Account

DO NOT USE THIS SPACE

•	Statement and Digitation		
	To the best of my knowledge and b	elief, the foregoing information is true and correct and an	y attached copy is a true copy of
	the original document.		
		The state of the s	
	Laurence H. Posorske	(Jurencon/o-10-16)	August 15, 2001
	Name of Person Signing	Signature	Date

Total number of pages including cover sheet, attachments, and document:

Statement and Signature

5.

ATTORNEY DOCKET No.: 031676.0212

ASSIGNMENT

WHEREAS, WE, Kirk Emil APT, residing at 6312 Early Glow Court, Columbia, Maryland 21797; F.C. Thomas ALLNUTT, residing at 95 Bentley Lane, Port Deposit, Maryland 21904; David J. KYLE, residing at 1801 Narbeth Road, Catonsville, Maryland 21228; and James Casey LIPPMEIER, residing at 311 A Street, N.E., Apt. 3, Washington, DC 20002, have invented certain new and useful improvements in and to the subject matter of:

TROPHIC CONVERSION OF OBLIGATE PHOTOTROPHIC ALGAE THROUGH METABOLIC ENGINEERING

described in an application for United States Letters Patent filed on April 23, 2001, and accorded Application No. 09/839,536;

AND, WHEREAS, MARTEK BIOSCIENCES CORPORATION, a corporation organized under the laws of the State of Maryland, having a place of business located at 6480 Dobbin Road, Columbia, Maryland 21045 (hereinafter "ASSIGNEE"), is desirous of acquiring certain rights to the improvements and under the application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration, receipt of which is hereby acknowledged, we do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said improvements, said United States application, any other United States applications, including provisional, divisional, renewal, substitute, continuation, reexamination and reissue applications, based in whole or in part on said United States application or in whole or in part on said improvements, any foreign applications, including international and regional applications, based in whole or in part on any of the aforesaid United States applications or in whole or in part on said improvements, and in and to any and all letters patent, including extensions thereof, of any country which have been or may be granted on any of the aforesaid applications or on said improvements or any parts thereof;

AND WE hereby authorize and request our agents, Brobeck, Phleger & Harrison LLP, whose address is 1333 H Street, N.W., Suite 800, Washington, DC 20005, to insert hereon any identification necessary or desirable for recordation of this document, including the filing date and application number of said application when known.

AND WE hereby agree for ourselves and our heirs, executors and administrators to execute without further consideration any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-referenced application or in the preparation or prosecution of any continuing, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extensions or interference proceedings, or other applications for patents of any region or country, that may be necessary to secure to ASSIGNEE its interest and title in and to said improvements or any parts thereof, and in and to said several patents or any of them;

AND WE hereby covenant for ourselves and our legal representatives, and agree with said ASSIGNEE, its successors and assigns, that we have granted no right or license to make, use, sell or offer to sell said improvements, to anyone except said ASSIGNEE, that prior to the execution of this deed, our right, title and interest in said improvements had not been otherwise encumbered, and that we have not and will not execute any instrument in conflict therewith;

AND WE do hereby authorize and request the United States Commissioner for Patents to issue any and all letters patent which may be granted upon said United States applications, or upon said improvements or any parts thereof when granted, to said ASSIGNEE.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

8/2/01 Date	Kirk Emi	KI G
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State of) ss:)	
On this Public in and for the County to me known and known to foregoing instrument, and ack	and State aforesaid, person on me to be the person of	of that name, who signed and sealed the
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Date Jon	F.C. Thø	JAS HETT
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On this	day of	, 2001, before me a Notary onally appeared,
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7/2/01 Date	James Ca	asey LIPPMEIER
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Brobeck, Phleger & Harrison, $\iota \not \supseteq$ Finance Department

DISBURSEMENT AUTHORIZATION FORM

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To the Honorable Commissioner for Pat		ument(s)	or copy(ies) the	ereof.
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F.C. Thomas ALLNUTT David J. KYLE	! D B //6/0	J		•
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2. Name and Address of Party(ies) receiving an interest (assign				
Name: Martek Biosciences Corporation	Name:		*	
Address: 6480 Dobbin Road	Address:			
Columbia, Maryland 21045				•
Country: U.S.A.	Country:			
Additional name(s) and address(es) att	tached?] Yes	No No	
3. Nature of Conveyance:				
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Others on additional sheet(s) attact S. Name and address of party to whom correspondence concerning document should be mailed: Laurence H. Posorske Intellectual Property Department Brobeck, Phleger & Harrison LLP 1333 H Street, N.W. Suite 800 Washington, DC 20005 (202) 220-6000 (telephone) (202) 220-5200 (facsimile) DO NOT USE 9. Statement and Signature To the best of my knowledge and belief, the foregoing inform the original document. Laurence H. Posorske Name of Person Signing Total number of pages including cov 101 LMUELLER 00000259 09839536	hed? Y 6. Total num Applii + Patent = Total: 7. Total Fee 8. Deposit Act E THIS SPACE mation is true and Signature	es	No tions and pater 1 3.41) \$ be charged to lead	nts involved: 40.00 Deposit Account heet attached) at or credit any eposit Account opy is a true copy August 15, 200

ATTORNEY DOCKET No.: 031676.0212

ASSIGNMENT

WHEREAS, WE, Kirk Emil APT, residing at 6312 Early Glow Court, Columbia, Maryland 21797; F.C. Thomas ALLNUTT, residing at 95 Bentley Lane, Port Deposit, Maryland 21904; David J. KYLE, residing at 1801 Narbeth Road, Catonsville, Maryland 21228; and James Casey LIPPMEIER, residing at 311 A Street, N.E., Apt. 3, Washington, DC 20002, have invented certain new and useful improvements in and to the subject matter of:

TROPHIC CONVERSION OF OBLIGATE PHOTOTROPHIC ALGAE THROUGH METABOLIC ENGINEERING

described in an application for United States Letters Patent filed on April 23, 2001, and accorded Application No. 09/839,536;

AND, WHEREAS, MARTEK BIOSCIENCES CORPORATION, a corporation organized under the laws of the State of Maryland, having a place of business located at 6480 Dobbin Road, Columbia, Maryland 21045 (hereinafter "ASSIGNEE"), is desirous of acquiring certain rights to the improvements and under the application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration, receipt of which is hereby acknowledged, we do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said improvements, said United States application, any other United States applications, including provisional, divisional, renewal, substitute, continuation, reexamination and reissue applications, based in whole or in part on said United States application or in whole or in part on said improvements, any foreign applications, including international and regional applications, based in whole or in part on any of the aforesaid United States applications or in whole or in part on said improvements, and in and to any and all letters patent, including extensions thereof, of any country which have been or may be granted on any of the aforesaid applications or on said improvements or any parts thereof;

AND WE hereby authorize and request our agents, Brobeck, Phleger & Harrison LLP, whose address is 1333 H Street, N.W., Suite 800, Washington, DC 20005, to insert hereon any identification necessary or desirable for recordation of this document, including the filing date and application number of said application when known.

AND WE hereby agree for ourselves and our heirs, executors and administrators to execute without further consideration any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-referenced application or in the preparation or prosecution of any continuing, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extensions or interference proceedings, or other applications for patents of any region or country, that may be necessary to secure to ASSIGNEE its interest and title in and to said improvements or any parts thereof, and in and to said several patents or any of them;

AND WE hereby covenant for ourselves and our legal representatives, and agree with said ASSIGNEE, its successors and assigns, that we have granted no right or license to make, use, sell or offer to sell said improvements, to anyone except said ASSIGNEE, that prior to the execution of this deed, our right, title and interest in said improvements had not been otherwise encumbered, and that we have not and will not execute any instrument in conflict therewith;

AND WE do hereby authorize and request the United States Commissioner for Patents to issue any and all letters patent which may be granted upon said United States applications, or upon said improvements or any parts thereof when granted, to said ASSIGNEE.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

8/2/01 Date	Kirk Em	il APT	· · · · · · · · · · · · · · · · · · ·
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7/2/01 Date	James (Casey LIPPMEIER	
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